VA Montana Healthcare System

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In Reply Refer To: 436/139

Project: 436-15-103, Physical Security Improvements

Scope of Work

The VA Montana Healthcare System requires the services of a qualified Architect / Engineer (A/E) firm to provide design services facilitating the enhancement of physical security of the Fort Harrison Campus to include site access control, enhancement of force protection for individual buildings, expansion of the existing Personnel Access Control System (PACS), and the establishment and consolidation of a video monitoring system (CCTV) and a facility re-key. Primary requirements governing the design of the project can be found in the most current versions Mission Critical Facilities Design Manual and Handbook 0730 (primarily Appendix B), both available in the Technical Information Library. The design should allow for a least $200,000 in deductive alternates in segregated sheets/details as determined by the VA related to overall value to the project.

Site Physical Security is a significant concern for VA Montana at this time. It is recognized that the scope of this project will not include full implementation of the Site Considerations as documented in Sections 3.2, 3.3, and 3.4 of the Mission Critical Facilities Design Manual, however significant progress can be made through the following actions:

1. Perimeter Fences – As the VA is enveloped by a National Guard Facility, the perceived need for fencing is limited to ingress and egress to the station to allow for lock down as necessary. To block the primary entrance and possible adjacent non-roadway vehicular access, VA Montana anticipates the design of a gate and fence system spanning approximately 300 feet. Construction is to be consistent with the historical nature of the site and complaint with the design criteria.
2. Vehicle Screening – A simple bypass lane to allow for the stopping and searching of vehicles is needed, however accompaniments such as a guard house is not warranted.
3. Vehicle Barriers – Most entrances and critical infrastructure components are appropriately protected as per the criteria in section 3.4, however an approximate total of 10 entrances or

pieces of critical infrastructure will require design and construction of compliant vehicle barriers. The preferred method will be unlit bollards. Locations are to be identified in conjunction with the VA during site verification.

Personnel Access Control Systems are to be designed and installed in locations as per guidance contained in Handbook 0730 Appendix B and in compliance with Mission Critical Facilities Design Manual Section 10. The existing system comprises Bosch hardware and software and has approximately 130 secured access points meeting a large portion of the requirements contained in the guidance. It is anticipated that the addition of about 50 stations will be required to meet all criteria. Integration into the existing system or replacement of the existing system to provide a singular consolidated product at the end of the project will be required. Data archival is necessary and storage capacity will be required to exceed criteria by 20% to allow for future expansion.

A Visual Monitoring System meeting the basic objectives of the Mission Critical Facilities Design Manual Section 10 is a large component of this design effort. It is widely understood that full implementation would exceed the budget of this project and as such, it is expected that a marginal per unit construction cost be calculated prior to any detailed work to assist the VA in determining total scope of the implementation. The end objective is to have a contiguous system that continuously monitors high risk areas, records data through a network interface, and allows for a command center where continuous viewing and control is provided to VA Police staff. This may be best accomplished through a combination of simple static IP cameras as well as controllable cameras. Prioritization of monitoring locations and operational abilities of those locations will be provided by VA Police Service.

Key Control is a critical component physical security and a facility-wide rekey is necessary to restore operational control in this area. The VA exclusively uses the BEST keying system and will continue to do so as the existing hardware infrastructure remains in place. As best will perform most of the technical design and implementation, the responsibilities of the A/E are as follows:

Incorporate specifications that ensure that BEST is used and require full implementation of the latest iteration of the Keystone software as well as necessary training to ensure successful implementation.

Require BEST to conduct interviews to determine functional needs and validate and expand the keying structure as necessary. Structure is to be family based with a master for each segregated functional family with lower order subgroups to ensure appropriate levels of access to staff. Cross referencing will be required to ensure ghosting is not an issue.

Provide phasing guidance that allows for a measured approach and staged implementation to allow for corrections as the needs arise. Total number of doors per phase is to be provided as an

estimate only, -it is anticipated that a complete survey will be conducted by BEST as part of the construction proposal or submission process.

A/E Requirements

The VA expectation is that the A/E will provide sufficient design services to utilize this entire construction budget. The A/E will provide an initial itemized construction cost estimate as part of or prior to the 30% submission from which the VA may choose to modify quantities indicated as flexible in the scope to reflect the anticipated construction budget, limiting design activities only to those items that can be provided within the cost limitations. In addition to previously described criteria, the design must meet all applicable codes, regulations, and standards. This includes but is not limited to NFPA Codes, NEC, EPA, DEQ Regulations, OSHA 1926, and TJC Standards. Additionally, the A/E is required to meet all applicable laws and regulation not explicitly stated in this document. Design efforts and products shall be conducted and produced in compliance with VA Publications including Master Construction Specifications, Design Guides, and CAD Standards (http://www.cfm.va.gov/TIL).

A/E submissions are to comply with the requirements stated in PG-18-15 Volume C. The design submissions shall consist of progressively more complete documents consisting of the following:

- Schematic Design (30%)
- Schematic Design (50%)
- Design Development (90%)
- Design Development (95%)
- Construction Documents (100%)
- Final Construction Documents - Production

Meetings to review the submissions shall be conducted via teleconference if determined to be necessary by the VA. Physical appearance by the A/E shall be made at the request of the VA, but shall not exceed three (3) appearances by not more than three (3) technical experts per visit throughout the design phase. The Medical Center must remain accessible and operational throughout the construction period, therefore where appropriate a detailed sequence of work provided by the A/E shall serve to minimize impact of the construction. Specifications shall be derived from the VA Master Specifications and provided initially as part of the 90% submittal. The A/E will provide electronic sets of documents at the 30% and 50% submission level via and FTP or SharePoint site in .pdf format. The VA will have read access and the ability to load documents for noted revisions. Beginning with the 90% level, the A/E will provide two (2) hard copy submissions (drawings and specifications) in addition to the electronic submission. In addition

to the requirements for the 90% and 95% submissions, the 100% submission will require an accompanying independent Cover Sheet stamped “CONSTRUCTION DOCUMENTS” for VA signatures. Prior to production of the Construction Documents, all sets shall be stamped as “NOT FOR CONSTRUCTION”. At production of the construction documents, electronic set of drawings in AutoCAD and specifications in Microsoft Word as well as the .pdf formats shall be provided to the VA in addition to four (4) sets of full sized drawings, four (4) sets of half sized drawings and four (4) sets of specifications for procurement. To allow for posting, construction drawings shall also be provided electronically in half size (11x17) as PDF files. A schedule shall be provided by the A/E utilizing Microsoft Project and adhering to the basic schedule noted in this document as part of the proposal.

Existing Site Conditions

The VA will provide base drawings to a reasonable degree of accuracy, however accuracy is not guaranteed that will eliminate the need for site verification. It is expected that some level of site verification will be required for utility locations as well as above ceiling spaces as necessary.

Schedule

The anticipated Design Schedule is as follows:

Required Action	*Time from Award*
VA to Receive 30% Documents	End of Week 4
VA 30% Comments Back to A/E	End of Week 6
VA to Receive 50% Documents	End of Week 10
VA 50% Comments Back to A/E	End of Week 12
VA to Receive 90% Documents	End of Week 16
VA 90% Comments Back to A/E	End of Week 18
VA to Receive 95% Documents	End of Week 22

VA 95% Comments Back to A/E	End of Week 24
VA to Receive 100% Documents	End of Week 26
VA 100% Comments Back to A/E	End of Week 27
VA to Receive Final Construction Documents - Production	End of Week 28

Construction Period Services

During the construction period, the A/E will review all necessary technical submittals as submitted by contractor and will recommend approval/disapproval to the VA. The A/E will create and manage a submittal log that clearly designates all required submittals as well as what specification sections those segregated submittals address. The A/E will act as a consultant to the VA for the duration of project, and will serve as primary response to receive RFI's from the contractor. During construction, the A/E will provide a representative familiar with project to make a site visit when requested by the VA. Include three (3) construction period site visits in the proposal. A representative from the A/E will be expected to attend a final inspection to generate punch list items. Visual correspondence at the rest of the A/E can be provided by the VA to ensure deliverance of a quality product with reduced need for physical presence. Following Construction, the A/E shall complete as-built drawings from contractor provided red-lines and furnish electronically in AutoCAD on CD to the VA.

Bid Schedule

The total scope of the project is highly cost driven, therefore the significant impacts to overall cost of design are limited to document procurement, site investigation, production costs, construction period services, and site visits. Those items are to be segregated as quantity based line items.

Deductive Alternate #1

Provide an itemized visual monitoring design cost as per this document. Provide a fixed base cost and a per unit marginal cost to allow scaling of the design as necessary.

Deductive Alternate #2

Provide a base and per unit cost similar to Deductive Alternate #1 for the PACS expansion.